



Hugh Hammond Bennett (right), first Chief of the Soil Conservation Service.

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NRCS Announces Sign-Up Deadline *January Date for Farm Bill Program Applications for 2005*

USDA is accepting applications for the Environmental Quality Incentives Program (EQIP), Wildlife Habitat Incentives Program (WHIP), and Grasslands Reserve Program (GRP), all of which are part of the 2002 Farm Bill. Applications received on or before January 28, 2005 will be considered for funding from fiscal year 2005 program funds.

The Environmental Quality Incentives Program (EQIP) provides cost-share assistance to working farms and ranches for the installation of conservation practices that will address locally identified resource concerns. Conservation practices such as brush management, irrigation system improvements, water developments to improve grazing distribution, timber stand improvement, and wildlife habitat improvement are some of the types of activities that are eligible for funding through EQIP.



The Wildlife Habitat Incentives Program (WHIP) provides cost-share assistance to individuals interested in improving habitat to support wildlife populations of national, state, tribal, and local significance. In addition to the regular funding through WHIP, special funds are available this year focused on

improving riparian habitat along the Rio Grande and Pecos Rivers.

The Grassland Reserve Program (GRP) provides funding for grazing operations under threat of conversion to non-grazing uses, such as cropland or urban development. Under GRP, applicants accepted into the program

(Continued - page 3)

2004 Was A Very Good Year: Great Reflections



Rosendo Trevino III
State Conservationist

We are at the end of another great year, and I want to take time to share some thoughts.

First, Farm Bill implementation in New Mexico is at its best. NRCS employees were able to write over 900 contracts on 3.5 million acres, and commit over \$28 million of federal cost-share dollars. We received \$7.9 million to assist Truth or Consequences with flood control

protection. The project is close to completion and was successful in averting flooding problems when we received a 100-year storm. Our soils staff mapped and classified over 326,000 acres. New Mexico was one of 22 states to participate in the Conservation Security Program (CSP) and provided exemplary conservationists with stewardship payments. The eight RC&D Councils in New Mexico took \$1 million in NRCS support and leveraged \$48.2 million in contributions for rural New Mexico. All this work was accomplished by the tremendous effort of NRCS employees, our Soil & Water Conservation District partners, and the RC&D Council member.

Second, the partnership between the New Mexico Soil & Water Conservation Districts, New Mexico Department of Agriculture, and NRCS was able to continue with

funding the Farm Bill Employee pilot program. Under this program 25 New Mexicans were hired to help NRCS implement the Farm Bill programs. This is an excellent program where operators and managers are provided with technical assistance.

Third, Jack Bricker, deputy state conservationist in New Mexico, was promoted to state conservationist in Michigan. Ken Leiting, state resource conservationist and my friend ... right-hand person ... and confidant; Leon Martinez, HUB RC&D coordinator; and Edward Romero, Espanola district conservationist; have made the difficult decision to retire. Best wishes on your retirement.

Thank you for your support and commitment to New Mexico's natural resources. From our families to yours, we wish you happy holidays and a prosperous new year.

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Heavily Forested Acres Adjacent to High School Treated



The South Central Mountain RC&D, in collaboration with the Ruidoso Wildland Urban Interface group, developed a proposal to reduce the fuel load on approximately 280 acres of heavily forested land immediately adjacent to Ruidoso, New Mexico and managed by the State Land Office. Phase IV of the multi-phase project was completed in October 2004. The project is typical of New Mexico RC&D projects where last year for every dollar spent by NRCS, \$48 were leveraged from other funding sources.

“Approximately \$360,000 of federal funds and \$110,000 of State Land Office land maintenance funding was obtained to treat this acreage,” said Dick Shaw, NRCS RC&D coordinator. “Additionally, local contractors have benefited from employment opportunities created as a result of small wood utilization enterprises.”

The acreage, known locally as Moon Mountain, is a classic example of a wildland component of the wildland/urban interface. The risk potential for catastrophic wildfire on and around this forested land base was very high. Most importantly, approximately 19 acres immediately adjacent to Ruidoso High School were treated. The treated acreage created not only defensible space, but wildlife habitat for deer, elk, turkey, and bear.

For additional information about RC&D projects contact your local USDA Service Center.

NRCS Announces (continued from page 1)

enter into either a rental contract or an easement contract with USDA. The USDA provides a per acre payment to maintain and improve the grassland resource.

Applications for USDA conservation programs are accepted on a continuous basis. All applications received by close of business January 28, 2005 will be reviewed for eligibility, evaluated and ranked for funding. The highest ranked applications will be selected for contract development within the amount of funding available for each program.

Additional information about each of the conservation programs can be obtained from your local NRCS or Conservation District office or through the internet at www.nrcs.usda.gov.

Applications for participation will be accepted at local USDA Service Centers.



Stream Barbs Successful Technique at Taylor Creek

Many creeks and riparian areas in New Mexico have damaged or stressed reaches. During the past seven years, research has been conducted around the state on several perennial creeks to examine how low impact, low cost methods can help in hastening the improvement of riparian areas. Healthy riparian areas are important for wildlife and bird habitat, streambank stability, and water quality. A scenic riparian area often increases the value of the landowner's property.

The test site for one project is Taylor Creek in Catron County. The selected site had experienced a large scale flood event in the summer of 1997. The floodwaters scoured the stream leaving behind eroded banks and a coarse gravel to cobble substrate. The landowner was concerned that the bank erosion would continue and could lead to the loss of a corral complex.

After a field examination of the site, a treatment strategy consisting of a series of stream barbs was suggested. Stream barbs are rock structures that extend into the stream flow to modify flow patterns and bed topography. Stream barbs are designed to disrupt the erosive energy directed against the cut bank side of the stream bank. They are designed to be overtopped during channel-forming flow. Stream barbs are used for bank direction, to increase scour of point and lateral bars, to direct stream flow towards instream diversions, and to change bedload transport and deposition patterns. Barbs are also used to reduce the width to depth ratio of the stream. Ideally stream barbs should be used in conjunction with increasing riparian vegetation. The barbs relieve the flow pressure from the damaged bank while the vegetation provides long term stabilization through energy dissipation and sediment deposition.

At the right is a photo showing Taylor Creek in September 1999 before the restoration project began. The photo shows how little improvement had occurred within the stream channel in two years. The channel is wide and very shallow and riparian vegetation is lacking. The barbs were constructed using a crew of three

workers. Rocks were collected locally and were placed by hand. The photo showing the completed barbs shows how the stream begins to establish a sinuous flow pattern which helps the base flow to sort the bedload material and begin to form a more stable channel configuration. The

Stream barbs are designed to disrupt the erosive energy directed against the cut bank side of the stream bank.

final photo shows the stream in July 2004. Note the width of the channel and the abundance of sedges and rushes.

This project was constructed during a three day work period. Since the rock material was taken from the site,

This project was constructed during a three day work period.

no cost other than labor was incurred. During August 2004, two large flood events passed through the restored area with no damage to either the bank or the channel. The vegetation remained intact and the site has captured around eight inches of fine silty material.

Riparian areas are dynamic areas that quickly respond to treatment techniques. If you have any riparian areas needing restoration techniques, please contact Steve Lacy, geomorphologist, at (505)761-4439..



Left: Taylor Creek, September 1999. Stream lacks riparian vegetation, has a coarse substrate, lacks sinuosity, and is wide and shallow.



Right: Taylor Creek, September 1999 upon the completion of the stream barb structures. The stream has a sinuous flow, and there is flat-water behind the barbs.



Left: Taylor Creek, August 2004 after two significant flood events. Debris is piled on the stream barb and there is recovering riparian vegetation growing through the newly deposited sediment.

Alkali Muhly To Be Released In 2005

Species good for riparian restoration, offers potential for other uses

Alkali muhly, sometimes called scratchgrass, (*Muhlenbergia asperifolia*) will be released in 2005 by the Plant Materials Center to commercial seed producers. The typical habitats for this species are damp meadows, moist riparian zones, and mesic (moderately moist) disturbed areas often with alkaline and saline soils. Alkali muhly is a perennial grass with elongated scaly rhizomes (underground stems that spread from the original plant and initiate new plants) and an open, finely-branched seed head up to 18 inches tall. The seed used to develop this selected release was collected in a damp arroyo bottom near the

Westwater Spring in San Juan County, New Mexico. Selection for agronomic production potential has resulted from several successive field plantings at the Plant Material Center.

The application of this species for riparian restoration on mesic sites with moderate salinity or alkalinity is a certainty. The Plant Material Center will be investigating the potential range of use of this species on more xeric and saline soils. The rhizomatous nature of this species as well as its tendency to thrive on shorelines of ditches and streams will make it very useful in bank stabilization. Because of its rapid spread, it could be planted

as seedling stock at low density to rapidly colonize stream and ditch banks susceptible to erosion.

Several commercial seed producers have expressed interest in producing alkali muhly seed. Several land management agencies have also encouraged the development of this release in particular the U.S. Department of Interior-Bureau of Reclamation, which has partially funded this effort. Alkali muhly seed should be commercially available in 2008. Seed will be available from the Plant Material Center for Field Office evaluation plantings in 2006.



RC&D Grant Aids Historic Grist Mill

Mill build 100 years ago to produce animal feed, flour

The Northern Rio Grande Resource Conservation & Development Council in conjunction with the Society for the Preservation of Old Mills recently aided in the repair and restoration of the Old Cordova Grist Mill in Vadito, New Mexico. The mill was built about 100 years ago by Acorcinio Cordova to produce coarse feed for animals and fine flour for the people of the valley.

The small mill was made from logs Cordova chose, cut, and hauled from the nearby mountains. Cordova located the right kind of rock for the millstones in Dixon, twenty miles away. He fashioned the millstones in Dixon, and then hauled them one at a time with a horse and cart to the mill site.

Acorcinio ran the mill until his death, when it became the property of his son, Laureano. Laureano has maintained the mill, and allowed a perfect replica to be made which is in the protective custody of the Kit Carson Museum in Taos.

The restoration project that was partially supported by the Northern Rio Grande RC&D called for the complete dismantling of the building and replacement of those beams that were rotting. New concrete footings were poured for a foundation, with care taken to ensure that the footings would not be prominent in the final



Old Cordova Grist Mill In Vadito, New Mexico

stage. Once the structure was back up, ceiling beams and latillas were installed, and then the roof cover completed using the original design.

The most significant portion of the project was the reconstruction of the water wheel that powers the mill. The original water wheel was completely deteriorated and could not be salvaged. As a result, precise measurements of the original wheel were taken, and a new wheel constructed.

The mission of RC&Ds includes social and economic development of

rural areas. Supporting the preservation of northern New Mexico's economic history is indeed an asset to the community. This small handmade gristmill stands out as a gem in the history of Vadito and surrounding area.

For more information about RC&D projects in northern New Mexico contact David Manzanares(505)753-6412.

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